

# Inductive sensor

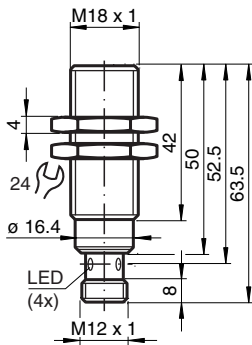
## NMB10-18GH50-E2-V1



- 10 mm flush
- Active surface metal
- One-piece housing with stainless steel (V4A; 1.4435)



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	10 mm
Installation		flush in mild steel
Output polarity		DC
Assured operating distance	$s_a$	0 ... 8.1 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.25
Reduction factor $r_{304}$		0.5 (0.9 of material thickness 2 mm)
Reduction factor $r_{St37}$		1
Output type		3-wire

#### Nominal ratings

Installation conditions

Release date: 2022-05-25 Date of issue: 2022-05-25 Filename: 288265\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

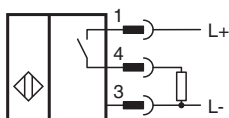
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

A		0 mm
B		16 mm
C		30 mm
F		60 mm
Operating voltage	$U_B$	10 ... 30 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	3 ... 15 typ. 5 %
Reverse polarity protection		yes
Short-circuit protection		yes
Voltage drop	$U_d$	$\leq 2$ V
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	$\leq 0.1$ mA
No-load supply current	$I_0$	$\leq 10$ mA
Time delay before availability	$t_v$	$\leq 40$ ms
Switching state indicator		LED, yellow
<b>Limit data</b>		
Operating pressure statically		60 bar (870.2 psi) max.
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		655 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		Stainless steel 1.4435 / AISI 316L
Sensing face		Stainless steel 1.4435 / AISI 316L
Degree of protection		IP68 / IP69K
Mass		24 g
<b>General information</b>		
Assembly dimensions		x: 18 mm y: $\geq 4$ mm

## Connection



## Connection Assignment



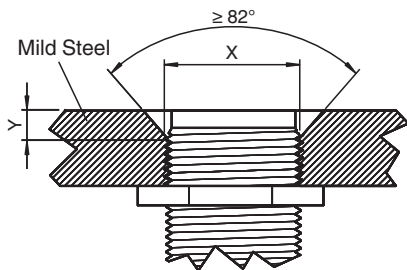
Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Installation



## Mounting



Sensor face is flush with mounting surface.

## Accessories

	<b>BF 18</b>	Mounting flange, 18 mm
	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	<b>V1-G-BK2M-PUR-U</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant

Release date: 2022-05-25 Date of issue: 2022-05-25 Filename: 288265\_eng.pdf